

Title (en)

Method and device for the recuperation of a bit clock from a digital telecommunication signal.

Title (de)

Verfahren und Schaltungsanordnung zur Rückgewinnung eines Bittaktes aus einem empfangenen digitalen Nachrichtensignal.

Title (fr)

Méthode et dispositif de récupération d'une horloge bit d'un signal de télécommunication numérique.

Publication

EP 0345564 B1 19950118 (DE)

Application

EP 89109517 A 19890526

Priority

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Abstract (en)

[origin: EP0345564A2] For recovering such a bit clock, a bit clock having the frequency of the signal to be received is generated at the receiving end by means of a clock generator (TG) and a counter (Z). The position in time of the rising edge of a received pulse is evaluated in comparison with a predetermined position in time of the effective pulse edge of the bit clock generated by means of a phase evaluating logic (PAL). In the case of synchronism, the effective pulse edge is located in the centre of the pulse received in each case, considered in terms of time (bit-centre sampling). Due to non-ideal line characteristics, the period of the received pulses can deviate from the normal value. To be able to distinguish an instantaneous edge drift of a received pulse (pulse too short or too long) from an actual phase shift, the position in time of the rising and of the falling edge of each pulse is now determined. <??>If too short or too long a pulse deviating from the normal period is present which, however, is symmetric with respect to the predetermined position in time of the effective pulse edge of the bit clock generated, this is an instantaneous edge drift so that no phase correction is required. <IMAGE>

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CPC (source: EP US)

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